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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,178	09/25/2000	John R. Fredlund	81687RLO	3016

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Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 01/12/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/669,178

Applicant(s)

FREDLUND ET AL.

Examiner

Gevell Selby

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The attempt to incorporate subject matter into this application by reference to U.S. Patent applications Serial No. 09/045,016 and 09/597,134 is improper because this application is a new application and not a continuation or divisional of the other applications.

An applicant may incorporate by reference the prior application by including, in the continuation or divisional application-as-filed, a statement that such specifically enumerated prior application or applications are "hereby incorporated herein by reference." The statement may appear in the specification or in the application transmittal letter. The incorporation by reference statement can only be relied upon to permit the entering of a portion of the prior application into the continuation or divisional application when the portion of the prior application has been inadvertently omitted from the submitted application papers in the continuation or divisional application.

Drawings

2. Figures 1-3 and 5 – 8c should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. The drawings display the same invention discloses in U.S. Patent 6,320,573.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 10 uses the term “either” to specify that an option of two limitations will follow, but fails to point out the second limitation making the claim indefinite. For the purposes of the rest of this review of the application, the term “either” will be omitted from the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 4-10, 13-16, and 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al., US 4,887,161.**

In regard to claim 1, Watanabe et al., US 4,887,161, discloses a camera (see figure 2) having a removable image bearing medium for camera captured images that includes film or a digital memory comprising:

(a) a display (see figure 2, element 24) disposed relative to the removable image bearing medium (see figure 2, element 20) so that the display is removable from the camera with the removable image bearing medium(see column 3, lines 42-44), such display responding to an applied power source for displaying images or information related to captured images and continuity to display such image after removal of the display from the camera and the removal of the applied power source (see column 5, lines 61-63 and column 7, lines 6-9);

[The power to the driver part of the display that changes the condition can be turned off and the display will continue the operate on the secondary solar battery which is a renewable power source that does not need to be conserved because of risk of running out.]

(b) means for actuating the display and applying the power source to provide images of one or more captured images or information related to such one or more captured images (see column 6, lines 1-9); and

(c) the display being positioned for viewing by a user (see figure 2 and column 2, lines 59-61).

In regard to claim 4, Watanabe et al., US 4,887,161, discloses the camera of claim 1 wherein the image bearing medium includes a removable memory card (see figure 4, element 20) having the digital memory (see figure 1, 22).

In regard to claim 5, Watanabe et al., US 4,887,161, discloses the camera of claim 1 wherein the image captured related information provides an indication of remaining

capacity of images to be taken by the camera (see figure 1, element D1 and column 5, lines 28-30).

In regard to claim 6, Watanabe et al., US 4,887,161, discloses the camera of claim 1 wherein the image captured related information provides a time or date (see figure 1, element D2 and column 5, lines 28-30).

In regard to claim 7, Watanabe et al., US 4,887,161, discloses the camera of claim 1 wherein the image bearing medium displays at least one indication of the status of the camera (see column 2, lines 60-61).

The display can be used as a viewfinder to indicate the image the camera will record in capture mode before the picture is taken.

In regard to claim 8, Watanabe et al., US 4,887,161, discloses the camera of claim 1 wherein the image bearing medium communicates an indicia of the capabilities of the display to the camera (see column 4, line 65 to column 5, line 7 and column 5, lines 22).

It is inherent that when the medium connects it indicates display capabilities in order for the control system to send display commands.

In regard to claim 9, Watanabe et al., US 4,887,161, discloses the camera of claim 7 wherein the camera actuates the display on the image bearing medium to remove camera status indications prior to removal of the image bearing medium from the camera (see column 2, lines 60-60 and column 8, lines 17-20).

It is inherent that when the display is in viewfinder mode and the medium is removed the camera will first change the image to the one with the smallest frame number.

In regard to claim 10, Watanabe et al., US 4,887,161, discloses a camera (see figure 2) having a removable image bearing medium for camera captured images that includes film or a digital memory comprising:

(a) a display (see figure 2, element 24) disposed relative to the removable image bearing medium so that the display is removable from the camera with the removable image bearing medium (see figure 2, element 20), such display displaying images or information related to captured images (see column 3, lines 26-33), the display including material which is effective in a first condition in response to a selected applied high voltage for changing the condition of the material to display one or more images or information related to the captured images wherein such material continues to display the one or more images or information after the removal of the high voltage (see column 5, lines 61-63 and column 7, lines 6-9);

[The power to the driver part of the display that changes the condition can be turned off and the display will continue the operate on the secondary solar battery which is a renewable power source that does not need to be conserved because of risk of running out.]

(b) means for actuating the display by selectively applying high voltages to the material to provide one or more images of one or more captured images or information related to such one or more captured images (see column 6, lines 1-9); and

(c) the display being positioned for viewing by a user ~~either~~ when the display is in the camera (see figure 2 and column 2, lines 59-61).

In regard to claim 13, Watanabe et al., US 4,887,161, discloses the camera of claim 10 wherein the image bearing medium includes a removable memory (see figure 1, element 20) card having the digital memory (see figure 4, element 22).

In regard to claim 14, Watanabe et al., US 4,887,161, discloses the camera of claim 10 wherein the image captured related information provides an indication of remaining capacity of images to be taken by the camera (see figure 1, element D1 and column 5, lines 28-30).

In regard to claim 15, Watanabe et al., US 4,887,161, discloses the camera of claim 10 wherein the image captured related information provides a time or date (see figure 1, element D2 and column 5, lines 28-30).

In regard to claim 16, Watanabe et al., US 4,887,161, discloses the camera of claim 10 wherein the image bearing medium displays at least one indication of the status of the camera (see column 2, lines 60-61).

The display can be used as a viewfinder to indicate the image the camera will record in capture mode before the picture is taken.

In regard to claim 18, Watanabe et al., US 4,887,161, discloses the camera of claim 10 further including a display type indicia disposed relative to the image bearing medium and wherein the actuating means includes means for reading such indicia to indicate that the display is acceptable for presenting data by the camera (see column 4, line 65 to column 5, line 7 and column 5, lines 22).

In is inherent that the control system checks the indication of display type before sending control signals to display on the medium.

In regard to claim 19, Watanabe et al., US 4,887,161, discloses the camera of claim 10 wherein the image bearing medium communicates an indicia of the capabilities of the display to the camera (see column 4, line 65 to column 5, line 7 and column 5, lines 22).

In is inherent that when the medium connects it indicates display capabilities in order for the control system to send display commands.

In regard to claim 20, Watanabe et al., US 4,887,161, discloses the camera of claim 10 wherein the camera actuates the display on the image bearing medium to remove camera status indications prior to removal of the image bearing medium (see column 2, lines 60-60 and column 8, lines 17-20).

It is inherent that when the display is in viewfinder mode and the medium is removed the camera will first change the image to the one with the smallest frame number.

In regard to claim 21, Watanabe et al., US 4,887,161, discloses a camera (see figure 2) having a removable image bearing medium for camera captured images that includes film or a digital memory comprising:

(a) a display (see figure 2, element 24) removably connected to the removable image bearing medium (see figure 2, element 20) so that the display is removable from the camera with the removable image bearing medium and the display is removable from the image bearing medium(see column 3, lines 42-44),

such display displaying images, whether in the camera or on the image bearing medium, or information related to captured images (see column 3, lines 26-33);

(b) means for actuating the display to provide images of one or more captured images or information related to such one or more captured images (see column 6, lines 1-9), and

(c) the display being positioned for viewing by a user (see figure 2 and column 2, lines 59-61).

In regard to claim 22, Watanabe et al., US 4,887,161, discloses the camera of claim 21 including a battery (see figure 4, element 27) provided on the removable image bearing medium which provides power for the display when the image bearing medium is removed from the camera (see column 5, lines 60-63).

In regard to claim 23, Watanabe et al., US 4,887,161, discloses the camera of claim 21 wherein the image bearing medium is film mounted in a film cartridge or a memory card (see figure 1 and column 3, lines 20-24).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 4,887,161 in view of Doane et al., US 5,695,682.

In regard to claims 2 and 11, Watanabe et al., US 4,887,161, discloses the camera of claims 1 and 10 with a liquid crystal display but lacks the chiral nematic liquid crystal material.

Doane et al., US 5,695,682, teaches the chiral nematic the cells of a liquid crystal display can be excited to a position or color with an electric field and remain stable when the field is absent and then changes again when another field is applied (see column 2, lines 34-65).

It would have been obvious to a person skilled in the, art at the time of invention, to modify Watanabe et al., US 4,887,161, in view of Doane et al., US 5,695,682, to have a display made of chiral nematic liquid crystal material in order to have the display hold its state even when a field is not applied as taught by Doane et al., US 5,695,682, so the display will not be as dependent of the battery.

In regard to claim 17, Watanabe et al., US 4,887,161, in view of Doane et al., US 5,695,682, as explained above, discloses the camera of claim 10 wherein the actuating means applies pulses of high voltage to the display to cause it to be effective in the first condition and to remain in such condition until pulses of lower voltage are applied (see Doane: column 2, lines 34-65).

9. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 4,887,161 in view of Gowda et al., US 6,628,333.

In regard to claims 3 and 12, Watanabe et al., US 4,887,161, discloses the camera of claims 1 or 10 but lacks wherein the image bearing medium, is film and a film cartridge mountable in the camera and includes such film.

Gowda et al., US 6,628,333, discloses a camera with a removable image bearing medium and display (see figure 4b and column 3, lines 19-25). The image bearing medium is a printer that prints images on instant film (see figure 5a and column 3, lines 65-67).

It would have been obvious to a person skilled in the art, at the time of invention, to modify Watanabe et al., US 4,887,161, in view of Gowda et al., US 6,628,333, to have a removable printer in order to print the images the camera captures on instant film as taught by Gowda et al., US 6,628,333.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art discloses cameras with removable displays:

US 2003/0038880,

US 6,587,140,

US 4,471,382.

The following art discloses displays with chiral nematic liquid crystals:

US 6,320,573,

US 6,262,697,

US 5,933,206,

US 5,417,883.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 703-305-8623. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on 703-308-6613. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

gvs



ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600